# (19)日本国特許庁 (JP) (12) 公開特許公報 (A)

(11)特許出願公開番号 特開2002-18378 (P2002-18378A)

(43)公開日 平成14年1月22日(2002.1.22)

(51) Int.Cl.7

識別記号

FΙ

テーマコード (参考)

B08B 7/04

A 6 3 B 47/04

B 0 8 B 7/04 A 6 3 B 47/04 A 3B116

審査請求 未請求 請求項の数2 OL (全 4 頁)

(21)出願番号

特願2000-210236(P2000-210236)

(22)出願日

· 平成12年7月11日(2000.7.11)

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Fターム(参考) 3B116 AA42 AB01 BA02 BA15 BB02

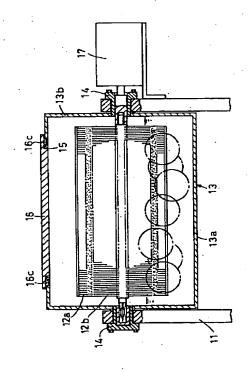
CD33

# (54) 【発明の名称】 ボール洗浄装置

#### (57)【要約】

【課題】 多くのボールを労力と時間を要することなく 簡単にその汚れを落とせるボールの洗浄装置を提供す る。

【解決手段】 移動用車輪を備えたフレーム11に、二 重軸受け14を介して円筒体13aと堰板13bからな る円筒容器13が支持され、この円筒容器13の内面に はブラシ12aが貼り付けられ、中心には回転ブラシ1 2b が貫通している。上記円筒容器 13の外周面にはボ ール投入口15が設けられ、このボール投入口15には ヒンジ16a とロックハンドル16b により開閉可能の 蓋16が取り付けられ、洗浄水が漏れないようパッキン グ16c が嵌められている。上記回転ブラシ12bは、 フレーム11の外側に取り付けられたギヤードモーター 17により回転可能になっている。



### 【特許請求の範囲】

【請求項1】 円筒体の両端に堰板を一体に設けた円筒容器をフレームに支持させ、上記筒状容器の外周面にボール投入口を設け、上記筒状容器の中心に回転ブラシを貫通させ、上記筒状容器の内面にブラシを貼り付けてなるボール洗浄装置。

【請求項2】 上記筒状容器を水密にするとともに、該 筒状容器を回転可能にしたことを特徴とする請求項1に 記載のボール洗净装置。

#### 【発明の詳細な説明】

[0001]

【発明の属する技術分野】この発明は多量の汚れたボールを一度に洗浄するための装置に関する。

[0002]

【従来の技術】使用後のボールの汚れを落とすにはウエスで拭き取るか、水中でブラシにより擦り落とすようにしいてる。

[0003]

【発明が解決しようとする課題】上記従来のようなボールの汚れを落とす方法では、ボールの数が少ないときは 20 問題にならないが、多くのボールの汚れを落とすには多くの時間と労力を必要とする。

【0004】従って本発明は、使用後の多くのボールを 労力と時間を要することなく簡単にその汚れを落とせる ボールの洗浄装置を提供することを課題とする。

[0005]

【課題を解決するための手段】上記課題を解決するためにこの発明は、円筒体の両端に堰板を一体に設けた円筒容器をフレームに支持させ、上記筒状容器の外周面にボール投入口を設け、上記筒状容器の中心に回転ブラシを貫通させ、上記筒状容器の内面にブラシを貼り付けてなり、必要ならば上記筒状容器を水密にするとともに、該筒状容器を回転可能にしてなる構成としたものである。

【0006】上記の如く構成するこの発明によれば、円筒容器に投入された多数のボールは回転するブラシによって洗浄される。とくに、円筒容器を回転させるときは、投入された多数のボールが反転・攪拌されるので一層効率よく洗浄される。

[0007]

【発明の実施の形態】次に図1乃至図3を参照しながら 40 第一実施形態について説明する。移動用車輪10を備えたフレーム11に、二重軸受け14を介して円筒体13 a と堰板13b からなる円筒容器13が支持され、この円筒容器13の内面にはブラシ12aが貼り付けられ、中心には回転ブラシ12b が貫通している。

【0008】上記円筒容器13の外周面にはボール投入口15が設けられ、このボール投入口15にはヒンジ16aとロックハンドル16bにより開閉可能の蓋16が取り付けられ、洗浄水が漏れないようパッキング16cが嵌められている。

【0009】上記回転プラシ12bは、フレーム11の外側に取り付けられたギヤードモーター17により回転可能になっている。

【0010】ボールBを洗浄するときは、ロックハンドル16bを外し、蓋16を開いて水とボールを投入し、蓋16を閉じロックハンドル16bをロックしてギヤードモーター17を起動して洗浄する。洗浄が終わると蓋16を開き、ロックピン18を抜いて円筒容器13を半回転させると水と洗浄されたボールが排出される。

10 【0011】次に図4および図5を参照しながら第二実施形態について説明する。円筒体23aと堰板23bからなる円筒容器23は、移動用車輪20を備えたフレーム21に二重軸受け24を介して支持されて、ギヤードモーター27aにより回転可能なっている。

【0012】上記円筒容器23の内面にはブラシ22aを貼り付けられ、その中心には回転ブラシ22bが貫通している。

【0013】上記円筒容器23の外周面にはボール投入口25が設けられ、このボール投入口25にはヒンジ26aとロックハンドル26bにより開閉可能の蓋26が取り付けられ、洗浄水が漏れないようパッキング26cが嵌められている。

【0014】上記回転ブラシ22bは、フレーム21の外側に取り付けられたギヤードモーター27bにより回転可能になっている。

【0015】ボールを洗浄するときは、ロックハンドル26bを外し、蓋26を開いて水とボールを投入し、蓋26を閉じロックハンドル26bをロックして両ギヤードモーター27a、27bを起動し洗浄する。このとき 円筒容器23の回転と回転ブラシ22bの回転は反対方向になる。洗浄が終わると蓋26を開き、ギヤードモーター27aを寸動させて投入口25を下向きにすると洗浄されたボールと水が排出される。

[0016]

【発明の効果】以上説明したようにこの発明によれば多量の汚れたボールを人力によらず簡単に洗浄できる。特に第二実施形態では円筒容器が回転してボールが反転・ 攪拌されるので効率よく洗浄できる。

【図面の簡単な説明】

40 【図1】第一実施形態の斜視図

【図2】同縦断面図

【図3】同横断面図

【図4】第二実施形態の斜視図

【図5】同縦断面図

【符号の説明】

10,20 移動用車輪

11,21 フレーム

12a, 22a 円筒容器内のブラシ

12b、22b 回転ブラシ

50 13,23 円筒容器

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13a, 23a 円筒体

136,236 堰板

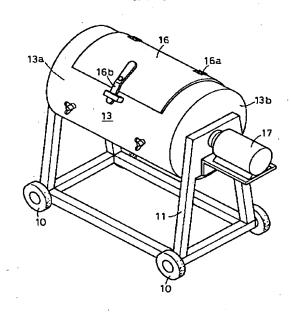
14,24 二重軸受け

15,25 ボール投入口

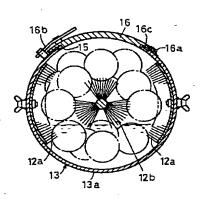
16,26 蓋

\* 16a, 26a ヒンジ 16b, 26b ロックハンドル 16c, 26c パッキング 17, 27a, 27b ギヤードモーター

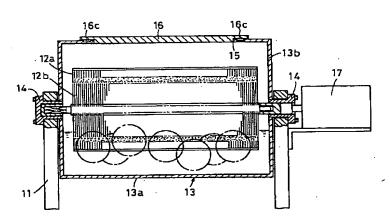
【図1】



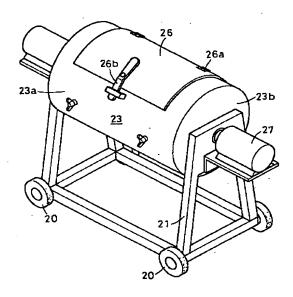




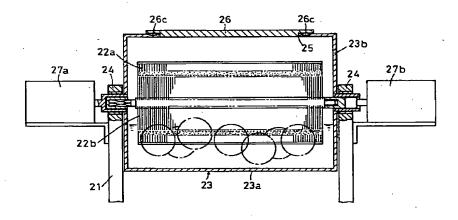
【図2】



【図4】



【図5】



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### Bibliography

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(19) [Country of Issue] Japan Patent Office (JP)
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- (12) [Official Gazette Type] Open patent official report (A)
- (11) [Publication No.] JP,2002-18378,A (P2002-18378A)
- (43) [Date of Publication] January 22, Heisei 14 (2002. 1.22)
- (54) [Title of the Invention] Ball washing station
- (51) [The 7th edition of International Patent Classification]

B08B 7/04

A63B 47/04

[FI]

B08B 7/04 A

A63B 47/04

[Request for Examination] Un-asking.

[The number of claims] 2

[Mode of Application] OL

[Number of Pages] 4

- (21) [Filing Number] Application for patent 2000-210236 (P2000-210236)
- (22) [Filing Date] July 11, Heisei 12 (2000, 7.11)

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[Name] Kamata Sentence 2 (besides two persons)

[Theme code (reference)]

3B116

[F term (reference)]

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#### 3B116 AA42 AB01 BA02 BA15 BB02 CD33

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#### Summary

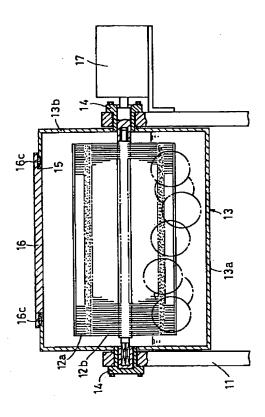
### (57) [Abstract]

[Technical problem] The washing station of a ball which can remove the dirt easily is offered without requiring an effort and time for many balls.

[Means for Solution] the frame 11 equipped with the wheel for movement — the double bearing 14 — minding — cylinder object 13a Sheathing board 13b from — the becoming cylinder container 13 supports — having — the inside of this cylinder container 13 — brush 12a it sticks — having — a center — rotation brush 12b It has penetrated. Ball input port 15 is formed in the peripheral face of the above—mentioned cylinder container 13, and it is hinge 16a in this ball input port 15. Locking handle 16b It is packing 16c so that the lid 16 which can be opened and closed may be attached and a wash water may not leak. It is inserted in. Above—mentioned rotation brush 12b Rotation has become possible by the geared motor 17 attached in the outside of a frame 11.

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### [Translation done.]

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#### CLAIMS

### [Claim(s)]

[Claim 1] The ball washing station which make a frame support the cylinder container which prepared the sheathing board in the ends of a cylinder object at one, prepare ball input port in the peripheral face of the above-mentioned tubed container, and the center of the above-mentioned tubed container is made to penetrate a rotation brush, and comes to stick a brush on the inside of the above-mentioned tubed container.

[Claim 2] The ball washing station according to claim 1 characterized by enabling rotation of this tubed container while making the above-mentioned tubed container watertight.

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#### **DETAILED DESCRIPTION**

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] This invention relates to the equipment for washing a lot of unclean balls at once.

[0002]

[Description of the Prior Art] It wipes off by the waste cloth to remove the dirt of the ball after use, or it is made to rub off with a brush underwater, and is. [0003]

[Problem(s) to be Solved by the Invention] Although it does not become a problem by the method of removing the dirt of a ball like above—mentioned before when there are few balls, many time and efforts are needed for removing the dirt of many balls. [0004] Therefore, this invention makes it a technical problem to offer the washing station of a ball which can remove the dirt easily, without requiring an effort and time for many balls after use.

[0005]

[Means for Solving the Problem] In order to solve the above-mentioned technical problem, this invention makes a frame support the cylinder container which prepared the sheathing board in the ends of a cylinder object at one. Prepare ball input port in the peripheral face of the above-mentioned tubed container, and the center of the above-mentioned tubed container is made to penetrate a rotation brush, and if it comes to stick a brush on the inside of the above-mentioned tubed container and is required for it, while making the above-mentioned tubed container watertight, it considers as the composition come to enable rotation of this tubed container of.

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[0006] According to this invention constituted like the above, many balls fed into the cylinder container are washed by the rotating brush. Since many thrown-in balls are reversed and stirred especially when rotating a cylinder container, it is washed much more efficiently.

[0007]

[Embodiments of the Invention] Next, the first operation gestalt is explained, referring to drawing 1 or drawing 3. the frame 11 equipped with the wheel 10 for movement — the double bearing 14 — minding — cylinder object 13a Sheathing board 13b from — the becoming cylinder container 13 is supported and brush 12a sticks on the inside of this cylinder container 13 — having — a center — rotation brush 12b It has penetrated.

[0008] Ball input port 15 is formed in the peripheral face of the above-mentioned cylinder container 13, and it is hinge 16a in this ball input port 15. Locking handle 16b It is packing 16c so that the lid 16 which can be opened and closed may be attached and a wash water may not leak. It is inserted in.

[0009] Above-mentioned rotation brush 12b Rotation has become possible by the geared motor 17 attached in the outside of a frame 11.

[0010] When washing Ball B, it is locking handle 16b. It removes, and a lid 16 is opened, water and a ball are thrown in, a lid 16 is closed, and it is locking handle 16b. It locks, and a geared motor 17 is started and washed. After washing finishes, a lid 16 is opened, and if a lock pin 18 is pulled out and the cylinder container 13 is half-rotated, water and the washed ball will be discharged.

[0011] Next, the second operation gestalt is explained, referring to drawing 4 and drawing 5 cylinder object 23a Sheathing board 23b from — the becoming cylinder container 23 is supported through the double bearing 24 on the frame 21 equipped with the wheel 20 for movement — having — geared-motor 27a It is rotation possible.

[0012] In the inside of the above-mentioned cylinder container 23, it is brush 22a. It is stuck and is rotation brush 22b in the center. It has penetrated.

[0013] Ball input port 25 is formed in the peripheral face of the above-mentioned cylinder container 23, and it is hinge 26a in this ball input port 25. Locking handle 26b It is packing 26c so that the lid 26 which can be opened and closed may be attached and a wash water may not leak. It is inserted in.

[0014] Above-mentioned rotation brush 22b Geared-motor 27b attached in the outside of a frame 21 Rotation has become possible.

[0015] When washing a ball, it is locking handle 26b. It removes, and a lid 26 is opened, water and a ball are thrown in, a lid 26 is closed, and it is locking handle 26b. It locks and they are both geared-motors 27a and 27b. It starts and washes. At this time, they are rotation of the cylinder container 23 and rotation brush 22b. Rotation becomes opposite direction. After washing finishes, a lid 26 is opened, and it is geared-motor 27a. The ball and water which were washed when it was made to inch and input port 25 was placed upside down are discharged.

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### [0016]

[Effect of the Invention] As explained above, according to this invention, a lot of unclean balls are not twisted for human power, but can be washed easily. Especially, with the second operation gestalt, since a cylinder container rotates and a ball is reversed and stirred, it can wash efficiently.

### [Translation done.]

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#### **DESCRIPTION OF DRAWINGS**

[Brief Description of the Drawings]

[Drawing 1] The perspective diagram of the first operation gestalt

[Drawing 2] This drawing of longitudinal section

[Drawing 3] This cross-sectional view

[Drawing 4] The perspective diagram of the second operation gestalt

[Drawing 5] This drawing of longitudinal section

[Description of Notations]

10 20 Wheel for movement

11 21 Frame

12a 22a Brush in a cylinder container

12b, 22b Rotation brush

13 23 Cylinder container

13a 23a Cylinder object

13b 23b Sheathing board

14 24 Double bearing

15 25 Ball input port

16 26 Lid

16a 26a Hinge

16b 26b Locking handle

16c 26c Packing

17, 27a, 27b Geared motor

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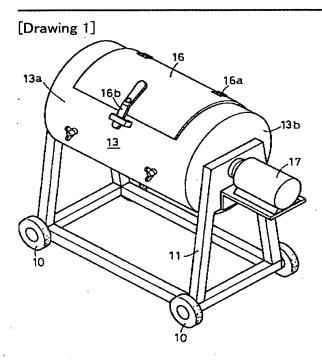
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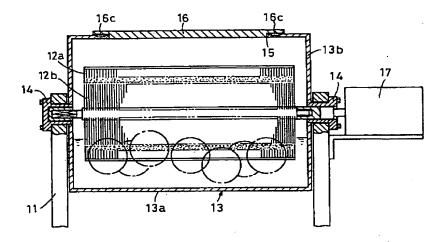
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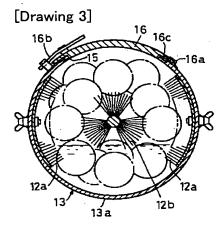
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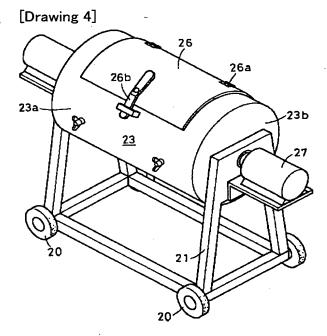
### **DRAWINGS**



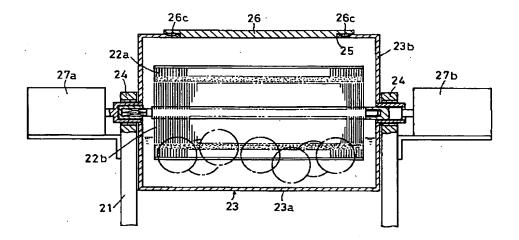
[Drawing 2]







[Drawing 5]



[Translation done.]